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FIRST RECORD OF THE SUBGENUS *PLANEMPIS* FREY (DIPTERA, EMPIDIDAE: *EMPIS* LINNAEUS) FROM VIETNAM, WITH DESCRIPTIONS OF THREE NEW SPECIES AND A KEY TO SPECIES OF THE ORIENTAL REGION

I. V. Shamshev

Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1,
St. Petersburg 199034, Russia. E-mail: shamshev@mail.ru

Summary. The subgenus *Planempis* Frey, 1953 of the genus *Empis* Linnaeus, 1758 (Diptera, Empididae) is recorded for the first time from Vietnam, including three new species: *E. (P.) gavryushini* sp. n., *E. (P.) laichauensis* sp. n., *E. (P.) vietnamensis* sp. n. The species were collected in mountains of Lai Châu Province (North-Western Vietnam). A key to 16 species of *Planempis* known currently from the Oriental Region is compiled.

Key words: Diptera, Empididae, *Empis*, *Planempis*, taxonomy, new species, key, South-East Asia.

И. В. Шамшев. Первое указание подрода *Planempis* Frey (Diptera, Empididae: *Empis* Linnaeus) из Вьетнама, с описаниями трех новых видов и определительной таблицей видов Ориентальной области // Дальневосточный энтомолог. 2020. N 409. С. 1-13.

Резюме. Подрод *Planempis* Frey, 1953 рода *Empis* Linnaeus, 1758 (Diptera, Empididae) впервые найден во Вьетнаме, включая три новых вида: *E. (P.) gavryushini* sp. n., *E. (P.) laichauensis* sp. n., *E. (P.) vietnamensis* sp. n. Новые виды были собраны в горах провинции Лайтяу (Северо-Западный Вьетнам).

Составлена определительная таблица для 16 видов *Planempis*, известных в настоящее время из Ориентальной области.

INTRODUCTION

Species of the subgenus *Planempis* Frey, 1953 of the genus *Empis* Linnaeus, 1758 (with *E. mandarina* Frey, 1953 as the type species) are medium-sized (4.0–5.0 mm) to very large (up to 12.0 mm) dance flies (Empididae). They are most readily distinguished from other *Empis* subgenera by the structure of the male genitalia, namely the cerci, which are enlarged, bifurcate, with dorsal lobes strongly sclerotized, often polished, flattened and closely approximate, leaving only a small opening (fenestrula) posteriorly (Saigusa, 1992, 2012; Shamshev & Daugeron, 2018).

The subgenus consists of 46 species (including three new species described herein) known almost exclusively from the eastern part of the Palaearctic (China, Japan, the Russian Far East) and from the Orient (China, Myanmar); one species was described from Europe (Austria, Bulgaria, Romania) and one species from Tajikistan (Shamshev, 2002; Shamshev & Daugeron, 2018; Daugeron & Shamshev, 2019). Shamshev and Daugeron (2018) compiled an updated check-list of species included in *Planempis*.

In this paper we describe three new species of *Planempis* from Vietnam. In addition, a key to 16 species of *Planempis* known currently from the Oriental Region is provided.

MATERIAL AND METHODS

This study is based on Empididae material housed in the Zoological Museum of Moscow State University, Moscow, Russia (ZMMU) and in the Zoological Institute of Russian Academy of Sciences, St. Petersburg, Russia (ZIN). Pinned, dried specimens were studied. To facilitate observations, the terminalia were macerated in cold 10% KOH, then put for a short period in 85% lactic acid and immersed in glycerine. The photos were produced using a Nikon SMZ 1500 stereomicroscope equipped with a Nikon D700 digital SLR camera and were aligned and stacked using the Helicon Focus 5.3.14 software. The holotypes of the new species are deposited in ZMMU.

TAXONOMY

Family Empididae Latreille, 1804

Subfamily Empidinae Latreille, 1804

Genus *Empis* Linnaeus, 1758

Empis (Planempis) gavryushini Shamshev, sp. n.

<http://zoobank.org/NomenclaturalActs/9B930F43-87BC-4529-AF42-0439937BA80D>

Figs 1–4

TYPE MATERIAL. Holotype – ♂, **Vietnam**: labelled as “VNM [= VIETNAM]: Lai Châu Prov., Hoàng Liên N.P., 22.34997°N, 103.76818°E, 1947 m, 19.IV 2012, D. Gavryushin”; “Holotypus *Empis gavryushini* Shamshev, sp. n.” (ZMMU). Paratype: 1 ♀, same data as holotype (ZMMU).

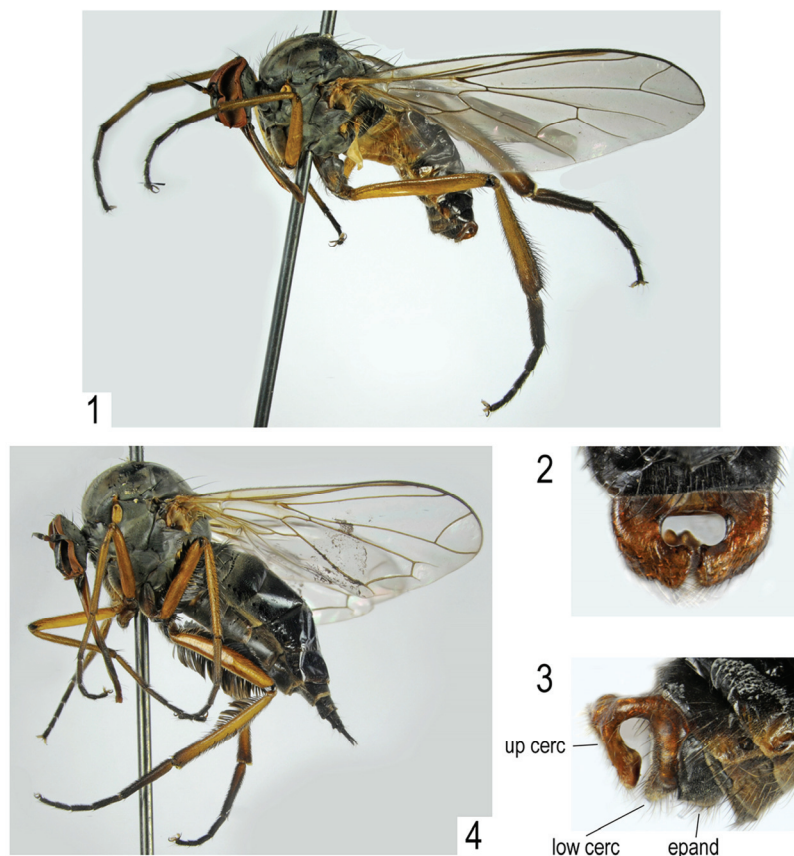
DIAGNOSIS. Large (body about 7 mm) greyish flies with extensively yellowish legs and incomplete veins M_1 and M_2 ; highly sexually dimorphic. Male: holoptic; hind tibia evenly thickened toward apex, yellow; abdomen partly yellowish; upper lobe of cercus with subtriangular apicoventral prolongation. Female: discal cell very long, almost reaching wing-margin; mid and hind legs extensively pennate.

DESCRIPTION. Male (Fig. 1). Body length 7.1 mm, wing length 7.7 mm. Head black. Holoptic, eye with upper ommatidia enlarged. Frons represented by very small triangular space below ocellar tubercle and slightly larger subtriangular space above antennae, densely greyish pruinose, bare. Face broad, mostly densely greyish pruinose, shiny along lower margin, bare. Ocellar triangle with 2 long black setae. Occiput densely greyish pruinose; with transverse row of 6 long black setae on upper part laterally, moderately long black postoculars, long pale hair-like setae behind mouth-opening. Antenna with scape and pedicel reddish brown, postpedicel and stylus black; scape almost 2 times longer than pedicel, both with minute setulae; postpedicel conical, very narrow at base, nearly 4 times longer than wide; stylus short, nearly 3 times shorter than postpedicel. Palpus brownish on about basal half and brownish yellowish apically; with scattered, short, dark, fine setae. Proboscis with labrum only slightly longer than head height (1.2 times).

Thorax black (postalar tubercle and scutellum laterally somewhat yellowish brown), mostly densely brownish grey pruinose; mesoscutum with 3 equally broad, brownish, rather indistinct vittae along rows of acrostichals and dorsocentrals. Prosternum bare. Proepisternum with numerous fine, pale, long setae on lower portion, bare on upper portion opposite anterior spiracle. Antepronotum with 5 black setae of different lengths (2 longest) on each side. Postpronotal lobe with 1 long black seta and numerous minute black setulae anteriorly. Mesonotal setation well prominent, main setae black; 1 short presutural intra-alar, 1 long presutural supra-alar (with 3 additional fine setulae anteriorly), 4 long notopleurals, 1–2 post-sutural supra-alars, 2 postalars (1 seta minute) and 4 scutellars (apical pair cruciate, longer than lateral pair); in addition, notopleuron with numerous pale and black fine setulae anteriorly; acrostichals arranged in 2 irregular rows, very short, scattered, lacking on prescutellar depression; dorsocentrals uniserial, sparse, somewhat longer than acrostichals, 2 prescutellar pairs long. Laterotergite with numerous yellowish setae. Anterior and posterior spiracles yellow.

Legs long, slender, subshiny (except coxae), mostly with dark setation; coxae densely greyish pruinose with yellowish fine setae anteriorly (in addition to stronger black setae); right mid leg missing in holotype. Legs colour: coxae darkened on basal part, yellowish toward apex; fore trochanter brownish yellow, mid and hind trochanters brownish; femora and tibiae almost entirely yellowish, only hind tibia somewhat brownish on apex; fore and mid tarsomeres 1–2 mostly yellowish, hind basitarsus yellowish near extreme base, otherwise tarsi brownish. Femora similarly covered with mostly minute setulae, bare ventrally; mid femur with rows of dark, fine, very short anteroventral and somewhat longer posteroventral setae; hind femur only with some very short anteroventral setae near apex. Fore tibia with 2–3 short dorsal setae on apical half. Mid tibia with row of short anterodorsal, 3–4 hardly

prominent posterodorsal and posteroventral setae. Hind tibia evenly thickened toward apex (lateral view), slightly curved (posterior view); with numerous moderately long setae on about apical 2/3 dorsally; 1 minute seta in posteroapical comb. Tarsomeres slender; hind basitarsus with 1 short anterodorsal seta closer to middle and 2 similar posterodorsal setae.



Figs 1–4. *Empis (Planempis) gavryushini* sp. n. 1 – male habitus, holotype, lateral view; 2 – cerci, male, dorsal view; 3 – terminalia, lateral view; 4 – female habitus, lateral view. Abbreviations: epand – epandrium; low cerc – lower lobe of cercus; up cerc – upper lobe of cercus.

Wing membrane faintly infusate. Basal costal seta present, short. Pterostigma distinct, brownish. Veins brownish, well sclerotised; M_1 and M_2 incomplete. Cell dm long, with elongate apex, its posterior margin (middle section of M_4) nearly 1.5 times longer than apical section of M_4 . Anal lobe well-developed; axillary incision acute. Squama yellow, pale fringed. Halter yellow.

Abdomen bicoloured; tergites mostly dark brown, tergites 2–3 broadly and tergites 4–7 narrowly yellowish laterally; mostly rather shiny, tergite 1 densely greyish pruinose, tergite 2 faintly greyish pruinose anteriorly; tergites 1–3 with long fine yellowish setae laterally and short black setae dorsally, remaining tergites with very short intermixed pale and black setae laterally and similar black setae dorsally. Sternites 1–3 entirely yellowish, sternites 4–7 becoming gradually darker toward terminalia with narrow yellowish posterior margin, sternite 8 entirely dark; all sternites faintly greyish pruinose, mostly with pale setae, sternites 7–8 with black setae posteriorly. Pregenital segments unmodified.

Terminalia (Figs 2, 3, not dissected) moderately large. Cerci reddish brown, subshiny, faintly pruinose, mostly bare, broadly fused on basal part, flattened dorsally, combined cerci broadly rounded (dorsal view) (Fig. 2), divided into two lobes (lateral view); “fenestrula” large, cylindrical; upper lobe of cercus narrow (lateral view) (Fig. 3), with long, somewhat broadened toward apex apicoventral prolongation, bearing numerous brownish setulae apically; lower lobe of cercus subtriangular (lateral view), with dense dark setulae along lower margin and apically. Epandrial lamella mostly hidden by segment 8, visible apical part dark brown, broad, rather subtriangular, dark brown, with short, fine, pale and dark setae. Hypandrium and phallus invisible in situ.

Female. (Fig. 4). Body length 7.7 mm, wing length 6.3 mm. Head and thorax as in male, except the following characters: dichoptic, ommatidia equally small; frons broad, parallel-sided, densely light grey pruinose, with marginal setulae; thorax slightly higher, more humped. Legs of similar colour but shorter and more robust, hind femur evenly convex dorsally, hind tibia uniformly slender; mid femur with long pennate setae dorsally and longer similar setae posteroventrally over entire length; hind femur with similar pennate setae dorsally and ventrally over entire length; mid tibia with short pennate setae dorsally (except narrow apical and basal parts), longer pennate posteroventral setae on about basal half, row of 6 short, strong, anterodorsal setae, 4–5 similar anteroventral setae on about apical half; hind tibia with fringe of very short pennate setae on about middle, long pennate setae on about basal half ventrally, 5–6 short strong anterodorsal setae. Wing shorter and somewhat broader, axillary excision almost 90°; basal costal seta absent; veins somewhat thicker, especially those forming discal cell; R_{2+3} and R_{4+5} strongly divergent, fork equilateral; discal cell very long, almost reaching wing margin, subsequently M_1 , M_2 and M_4 very short. Abdominal tergites mostly blackish brown to brown, tergites 2–6 narrowly brownish posteriorly; entire tergite 1, most part of tergite 2 anteriorly, tergite 3 narrowly laterally and entire tergites 7–8 greyish pruinose, otherwise tergites shiny; only tergites 1–2 with some longer pale and black setae, remaining tergites with minute setae. Sternites 2–6 brownish with yellowish posterior margin, greyish pruinose. Cercus dark, long, slender, with dark setulae.

DIFFERENTIAL DIAGNOSIS. *Planempis* includes one Palaearctic and two Oriental species with incomplete veins M_1 and M_2 : *E. dahuriensis* Shamshev, 2002

known from Russia (Amurskaya oblast) as well as *E. shennongana* Wang, Li et Yang and *E. prolongata* Wang, Li et Yang known from China (Hubei) (Shamshev, 2002; Wang *et al.*, 2010). Main differences between the new species and its Oriental allies are indicated in the key given below. In addition, the new species differs from *E. dahuriensis* primarily by larger size (7 mm vs about 5 mm) and by three equally broad, brownish vittae on the mesoscutum (vs. mesoscutum uniformly light grey pruinose).

ETYMOLOGY. The epithet refers to the name of the collector, Dmitry Gavryushin (Moscow).

DISTRIBUTION. Oriental: Vietnam.

***Empis (Planempis) laichauensis* Shamshev, sp. n.**

<http://zoobank.org/NomenclaturalActs/A3AE9FA3-3626-453C-81F4-CC48608093F3>

Figs 5, 6

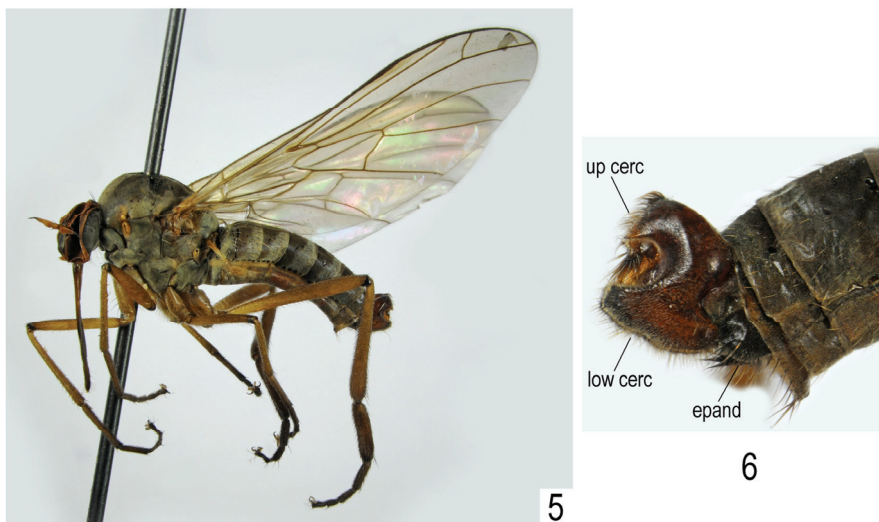
TYPE MATERIAL. Holotype – ♂, **Vietnam**: labelled as “VNM [= VIETNAM]: Lai Châu Prov., Hoàng Liên N.P., 22.34997°N, 103.76818°E, 1947 m, 19.IV 2012, D. Gavryushin”; “Holotypus *Empis laichauensis* Shamshev, sp. n.” (ZMMU).

DIAGNOSIS. Large (body 6.5 mm) brownish grey flies; eyes holoptic, antennae extensively orange; mesonotal setation very reduced, 2 notopleurals and 2 scutellars; legs yellow to brownish yellow, hind tibia and hind basitarsus slightly thickened; abdominal tergites with subtriangular large brownish spot anteriorly, remaining part pale grey.

DESCRIPTION. Male (Fig. 5). Body length 6.5 mm, wing length 6.9 mm. Head black. Holoptic, eye with upper ommatidia enlarged. Frons represented by very small triangular space below ocellar tubercle and slightly larger subtriangular space above antennae, densely greyish pruinose, bare. Face broad, densely greyish pruinose, bare. Ocellar triangle with 2 moderately long black setae. Occiput densely greyish pruinose; with transverse row of 4 short black setae on upper part laterally, very short black postoculars, long pale hair-like setae behind mouth-opening. Antenna almost entirely orange, only tip of postpedicel slightly darkened and stylus blackish; scape nearly 1.5 times longer than pedicel, both with minute setulae; postpedicel conical, narrow, 2.5 times longer than wide; stylus 1.6 times shorter than postpedicel. Palpus yellowish brownish on about basal half and yellowish apically; with scattered dark and pale fine setae. Proboscis with labrum only slightly longer than head height (1.2 times).

Thorax mostly dark, postpronotal lobe and postalar tubercle yellowish brown; mostly densely greyish brown pruinose; mesoscutum somewhat darker than mesopleuron, with brownish narrow vitta along acrostichals and two broader vittae along dorsocentrals (dorsal view). Prosternum bare. Proepisternum with several fine, pale, short setae on lower portion, bare on upper portion opposite anterior spiracle. Antepnotum with 5 black and yellowish short setae on each side. Postpronotal lobe with 1 short, fine, yellowish seta and some minute pale setulae anteriorly. Mesonotal setation very reduced, main setae black; 1 short fine presutural supra-alar (with 1–2

additional setulae), 2 moderately long notopleurals, 1 short fine postsutural supra-alars, 2 postalars (1 seta minute, yellowish) and 2 scutellars; in addition, notopleuron with numerous pale setulae anteriorly; acrostichals present only on anterior part of scutum, very few in number, minute, biserial; dorsocentrals uniserial, sparse, mostly minute, presutural pair only slightly longer. Laterotergite with numerous fine yellowish setae. Anterior and posterior spiracles yellow.



Figs 5, 6. *Empis (Planempis) laichauensis* sp. n. 5 – male habitus, holotype, lateral view; 6 – male postabdomen, lateral view. Abbreviations: epand – epandrium; low cerc – lower lobe of cercus; up cerc – upper lobe of cercus.

Legs long, slender, subshiny (including coxae), mostly with dark setation, only coxae with yellowish fine setae anteriorly (in addition to stronger black setae). Legs colour: coxae yellowish, only fore and hind coxae somewhat darkened near extreme base; trochanters brownish yellow; femora entirely yellow; tibiae extensively yellow, only hind tibia brownish yellow on about apical 2/3; basitarsi mostly brownish yellow (except darker apex), remaining tarsomeres of all legs brownish. Femora similarly covered with mostly minute setulae; mid femur with rows of more or less distinct anteroventral and stronger posteroventral setulae; hind femur almost uniformly slender, slightly narrowed toward base. Fore tibia with somewhat longer setae posterodorsally. Mid tibia without prominent setae (except circle of short subapicals). Hind tibia slightly evenly thickened toward apex (lateral view), straight (posterior view); mostly with short setulae, some short anterodorsal and posterodorsal setae closer to apex; 1 very short seta in posteroapical comb. Tarsomeres mostly slender, without prominent setae dorsally; hind basitarsus rather slightly thickened but at most as wide near base as hind tibia at apex; basitarsi with some strong setae ventrally.

Wing membrane faintly brownish infusate. Basal costal seta absent. Pterostigma indistinct, brownish yellow. Veins brownish, well sclerotised; M_1 , M_2 and anal vein (CuA+CuP) complete; R_5 and M_1 slightly divergent near wing-margin. Cell dm short, with elongate apex, its posterior margin (middle section of M_4) shorter than apical section of M_4 . Anal lobe well-developed; axillary incision acute. Squama dirty yellow, pale fringed. Halter yellowish.

Abdomen with tergites dark, densely pruinose, with subtriangular large brownish spot anteriorly, remaining part pale grey; sternites rather reddish brown, densely greyish pruinose; tergites 1–3 with rather sparse, long, pale setae laterally, remaining tergites with very short pale setae laterally, all tergites with some scattered blackish setulae dorsally. Sternites mostly with scattered pale setae, only sternite 8 with dark, moderately long, posteromarginal setae. Pregenital segments unmodified, tergite 8 fused with sternite 8.

Terminalia (Figs 6, not dissected) moderately large. Cerci mostly reddish brown, subshiny, faintly pruinose, mostly bare, broadly fused on basal part, flattened dorsally, combined cerci broadly rounded (dorsal view), divided into two lobes of subequal size (lateral view); “fenestrula” small, elongate oval; upper lobe of cercus rather subrectangular viewed laterally, with short, yellowish, pointed apicoventral prolongation (posterior view), numerous brownish setulae apically; lower lobe subtriangular (lateral view), with dense dark setulae along lower margin and apically. Epandrial lamella mostly hidden by segment 8, visible apical part subtriangular, dark brown, with moderately long blackish setae. Hypandrium and phallus invisible in situ.

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. Among the Oriental species of *Planempis* the new species is similar to *E. holocleroides* Frey known from Japan (Kyushu) and Myanmar as well as to *E. tianmushana* Li, Saigusa et Yang known from China (Zhejiang) (Li et al., 2012). Main differences between these species are indicated in the key given below.

ETYMOLOGY. The epithet refers to the type locality of the new species, Lai Châu Province (Vietnam).

DISTRIBUTION. Oriental: Vietnam.

***Empis (Planempis) vietnamensis* Shamshev, sp. n.**

<http://zoobank.org/NomenclaturalActs/B0035690-0E81-4560-BD42-BC65944DA49D>

Figs 7–10

TYPE MATERIAL. Holotype – ♂, **Vietnam**: labelled as “VNM [= VIETNAM]: Lai Châu Prov., Hoàng Liên N.P., 22.34997°N, 103.76818°E, 1947 m, 16.IV 2012, D. Gavryushin”; “Holotypus *Empis vietnamensis* Shamshev, sp. n.” (ZMMU). Paratypes: 3 ♂♂, same locality as holotype (1 ♂, ZMMU; 2 ♂♂ ZIN, one dissected).

DIAGNOSIS. Large (body about 8.5 mm) flies with entirely orange yellow thorax and largely yellow abdomen; eyes holoptic; antenna with scape, pedicel and about basal half of postpedicel reddish; legs extensively brownish; halter with darkened knob and yellow stem.

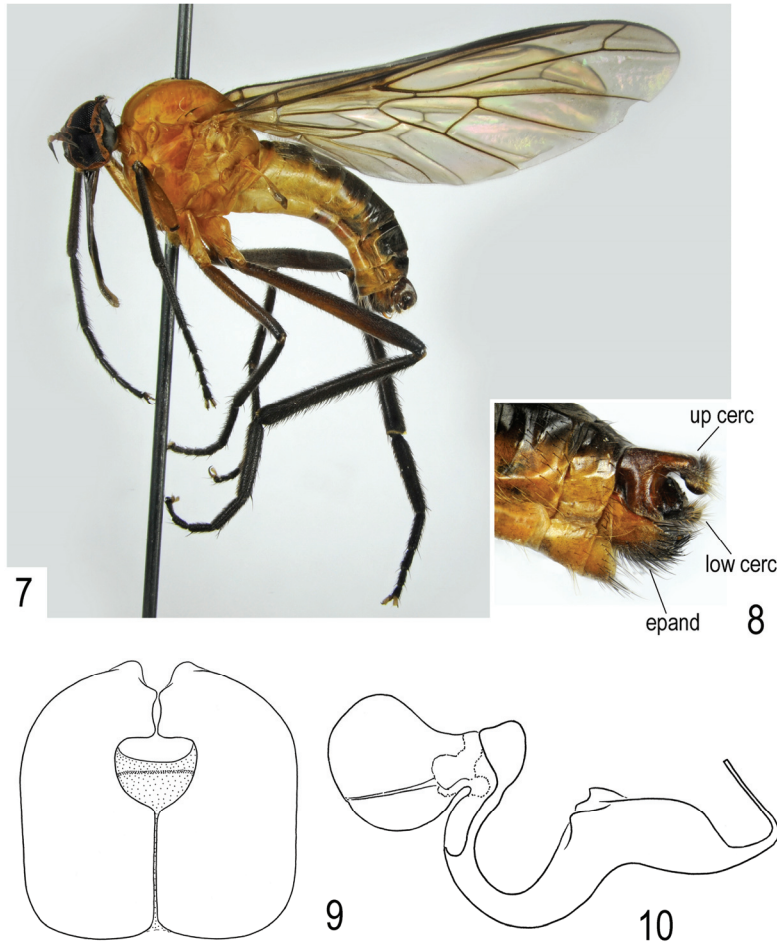
DESCRIPTION. Male (Fig. 7). Body 8.3–8.4 mm (holotype 8.3), wing 8.8–9 mm (holotype 8.9). Head mostly black, occiput yellowish behind moth-opening and narrowly round neck, face and gena reddish brown. Holoptic, eye with upper ommatidia enlarged. Frons represented by very small triangular space below ocellar tubercle and slightly larger subtriangular space above antennae, densely greyish pruinose, bare. Face broad, almost entirely densely greyish pruinose, shiny along lower margin, bare. Ocellar triangle with 2 minute dark setulae. Occiput densely greyish pruinose; with transverse row of 5–6 moderately long black setae on upper part laterally, very short black postoculars, pale hair-like setae behind mouth-opening. Antenna with scape, pedicel and about basal half of postpedicel reddish, remaining part of postpedicel and stylus brownish; scape nearly 2 times longer than pedicel, both with minute setulae; postpedicel conical, narrow, nearly 3 times longer than wide; stylus nearly 1.5 shorter than postpedicel. Palpus brownish on about basal half and yellowish apically; with scattered dark fine setae. Proboscis with labrum only slightly longer than head height (in holotype 1.2 times).

Thorax entirely brightly orange yellow, faintly pale pruinose, scutum dull. Prosternum bare. Proepisternum with several fine pale setae on lower portion, bare on upper portion opposite anterior spiracle. Antepronotum with 4–6 black short setae on each side. Postpronotal lobe with 1 short, fine, dark seta, 3–4 slightly shorter setae anteriorly and some minute setulae. Mesonotal setation very reduced; 1 short fine presutural supra-alar, 3 notopleurals (anterior seta much finer and shorter), 1–2 postsutural supra-alars, 2 postalars (1 seta minute) and 4–6 scutellars (6 only in one paratype); acrostichals present only on anterior part of scutum, very few in number, minute, 1–2-serial (in holotype uniserial); dorsocentrals uniserial, sparse, mostly minute, slightly longer than acrostichals, 1 presutural pair long. Laterotergite with numerous fine yellowish setae. Anterior and posterior spiracles yellow.

Legs long, slender, subshiny (including coxae), with dark setation. Legs colour: coxae and trochanters concolourous with thoracic pleuron (trochanters with narrow brown subapical stripe); fore femur almost entirely yellow, only narrowly brownish on apex (broader dorsally); mid and hind femora with similar pattern but mostly brownish yellow and chestnut brown, respectively; tibiae and tarsi blackish brown (fore tibia sometimes slightly paler). Femora similarly covered with mostly minute setulae; mid femur with rows of somewhat stronger anteroventral and posteroventral setulae; hind femur almost uniformly slender, slightly narrowed toward base. Fore tibia without prominent setae (except circlet of moderately long subapicals). Mid tibia with 3–4 short, hardly distinguishable anterodorsal and some similar anteroventral setae. Hind tibia slightly evenly thickened toward apex (lateral view) and slightly curved (posterior view); with numerous moderately long setae dorsally; 1 very short seta in posteroapical comb. Tarsomeres mostly slender, without prominent setae dorsally; hind basitarsus rather slightly thickened but at most as wide near base as hind tibia at apex; basitarsi with some strong setae ventrally.

Wing membrane faintly brownish infusate. Basal costal seta absent. Pterostigma distinct, brown. Veins brownish, well sclerotised; M_1 , M_2 and anal vein ($CuA+CuP$) complete (M_1 and M_2 slightly finer on extreme apex); R_5 and M_1 strongly divergent near wing-margin. Cell dm short, with elongate apex, its posterior margin

(middle section of M_4) shorter than apical section of M_4 . Anal lobe well-developed; axillary incision acute. Squama yellowish, pale fringed. Halter with darkened knob and yellow stem.



Figs 7–10. *Empis (Planempis) vietnamensis* sp. n. 7 – male habitus, holotype, lateral view; 8 – male postabdomen, lateral view; 9 – cerci, dorsal view; 10 – phallus, lateral view. Abbreviations: epand – epandrium; low cerc – lower lobe of cercus; up cerc – upper lobe of cercus.

Abdomen bicoloured, with broad dark brown stripe dorsally, otherwise yellow; almost shiny, very faintly greyish pruinose; mostly with pale fine setae longer on tergites 1–3 laterally, black setulae on tergites dorsally and on sternite 8 postero-marginally. Pre genital segments unmodified, segment 8 with fused tergite and sternite.

Terminalia (Figs 8–10) moderately large. Cerci (Fig. 8) reddish brown, faintly greyish pruinose, subshiny, broadly fused on basal part, flattened dorsally, combined cerci (Fig. 9) rather subrectangular viewed dorsally, divided into two lobes (lateral view) with additional rounded swelling between them, “fenestrula” inverted triangular (dorsal view); upper lobe of cercus narrow viewed laterally, with short, rounded, apicoventral prolongation, bearing numerous brownish and yellowish setulae apically; lower lobe digitiform (lateral view), with numerous, fine, short, brownish to brownish yellow setae. Epandrial lamella fused with cercus, mostly yellowish, brownish apically, subshiny, rather subrectangular, rounded apically (lateral view), with dark setae mostly along lower margin and apically. Hypandrium represented by two narrow lateral sclerites, membranous medially, bare. Phallus (Fig. 10) almost entirely hidden, yellow, strongly thickened, convex and with three small wing-like projections on middle part (lateral view), abruptly narrowed into slender, moderately long, curved forward apical portion. Ejaculatory apodeme large, extending far beyond basal curvature of phallus, four-winged, lateral and lower wings small, upper wing much larger.

Female. Unknown.

DIFFERENTIAL DIAGNOSIS. *Planempis* includes two species with partly yellow head and yellow thorax: *E. freyi* Yang, Zhang et Zhang, 2007 (replacement name for *E. quinquelineata* Frey, 1953) known from China (Fujian) and *E. lurida* Saigusa, 1992 known from Japan (Shikoku, Kyushu) (Frey, 1953; Saigusa, 1992). The new species can be readily distinguished from *E. freyi* primarily by much larger size (body about 8 mm vs. 4 mm in *E. freyi*), uniformly orange yellow mesoscutum (vs. with four blackish vittae in *E. freyi*) and holoptic eyes of the male (vs. dichoptic, separated by broad frons in *E. freyi*). The new species resembles more *E. lurida*, both species are similar in body size and have holoptic eyes of the male. However, the new species differs from *E. lurida* primarily by extensively darkened legs (vs. almost entirely orange yellow in *E. lurida*), simple abdominal tergite 8 of the male (vs. with dorsomedial projection in *E. lurida*) and flattened dorsally cerci (vs. with projection in *E. lurida*).

ETYMOLOGY. The epithet refers to the country of the origin of the new species, Vietnam.

DISTRIBUTION. Oriental: Vietnam.

Key to species of *Empis* (*Planempis*) from Oriental Region

1. Male 2
 - Female (unknown in *E. cochleata*, *E. freyi*, *E. gentiles*, *E. holocleroides*, *E. ingrata*, *E. lindebergi*, *E. mandarina*, *E. prolongata*, *E. shennongana*, *E. tianmushana*) 17
2. Eyes separated by relatively broad frons. [Additional characters: body 4 mm; head partly yellow, thorax entirely reddish yellow, mesoscutum with 5 dark vittae]. China (Fujian) ... *E. freyi* Yang, Zhang et Zhang, 2007
 - Eyes touching or almost touching (*E. gentilis*) on frons 3
3. Halter brownish, sometimes stem somewhat paler 4
 - Halter yellow, sometimes stem somewhat darker 9

4. Smaller, body about 5 mm; cerci convex dorsally. [Additional characters: mesoscutum with four vittae, legs uniformly blackish brown, wings dark brown]. China (Taiwan) ...
..... *E. hyalogyne* Bezzi, 1912
- Larger, body 8–14 mm; cerci flattened dorsally, rounded in dorsal view (*E. mandarina*-type, or “flat-topped genitalia”) 5
5. Thorax entirely orange yellow *E. vietnamensis* sp. n. 6
- Thorax black 6
6. Acrostichals and dorsocentrals multiseriate. Myanmar *E. janssoni* Saigusa, 2012
- Acrostichals uniseriate or absent, dorsocentrals 1–2-seriate 7
7. Acrostichals present, uniseriate; upper lobe of cercus viewed laterally with pointed apicoventral prolongation (Liu et al., 2012: 55, Fig. 4). China (Zhejiang)
..... *E. zhuae* Li, Saigusa et Yang, 2012
- Acrostichals absent; upper lobe of cercus viewed laterally with rounded apicoventral prolongation 8
8. Legs reddish brown to brown. China (Fujian) *E. mandarina* Frey, 1953
- Legs uniformly black. Myanmar *E. lindebergi* Saigusa, 2012
9. Veins M_1 and M_2 incomplete, not reaching wing-margin (Fig. 1) 10
- Veins M_1 and M_2 complete, reaching wing-margin 12
10. Femora extensively reddish yellow, at most darkened on extreme apex; abdomen partly yellow at base 11
- Femora mostly blackish brown (dark brownish yellow on apex); abdomen entirely black. [Additional characters: upper lobe of cercus with large, subtriangular apicoventral prolongation (lateral view).] China (Hubei) *E. shennongana* Wang, Li et Yang, 2010
11. Hind tibia almost entirely yellowish, only somewhat brownish on apex; cell dm long, its posterior margin (middle section of M_4) nearly 1.5 times longer than apical section of M_4 ; upper lobe of cercus with subtriangular apicoventral prolongation (Fig. 3)
..... *E. gavryushini* sp. n.
- Hind tibia blackish brown; cell dm shorter, its posterior margin (middle section of M_4) slightly shorter than apical section of M_4 ; upper lobe of cercus with finger-like apicoventral prolongation (lateral view). China (Hubei)
..... *E. prolongata* Wang, Li et Yang, 2010
12. Cerci flattened dorsally, rounded in dorsal view (*E. mandarina*-type, or “flat-topped genitalia”) 13
- Cerci of different structure 16
13. Mesoscutum somewhat bluish shiny, with velvety black vittae; abdomen brightly metallic shiny; palpus blackish; larger, body 10 mm. Myanmar *E. gentilis* Frey, 1953
- Mesoscutum and abdomen pruinose; palpus yellowish; smaller, body 5–6 mm 14
14. Antenna almost entirely orange, only tip of postpedicel slightly darkened and stylus blackish; scutellum with 2 setae *E. laichauensis* sp. n. 15
- Antenna blackish brown to black; scutellum with 4 setae 15
15. Coxae yellow, hind tibia entirely blackish brown. Japan (Kyushu), Myanmar
..... *E. holocleroides* Frey, 1953
- Coxae mostly blackish, hind tibia blackish brown on apex. China (Zhejiang)
..... *E. tianmushana* Li, Saigusa et Yang, 2012
16. Hind femur slender, reddish yellow. Wing infusate. Myanmar
..... *E. cochleata* Frey, 1953
- Hind femur slightly thickened, brownish on middle. Wing hyaline. [Additional characters: hind tibia broadened toward apex and slightly flattened; hind basitarsus slightly thickened, with 2 setae dorsally.] China (Taiwan) *E. ingrata* Frey, 1953

17. Halter yellow *E. gavryushini* sp. n.
 – Halter brownish, sometimes stem somewhat paler 18
 18. Smaller, body 4–5 mm; wing mostly hyaline, somewhat infusate apically. [Additional character: hind femora with pennate setae] *E. hyalogyne* Bezzi, 1912
 – Larger, body 8–14 mm; wing brownish infusate 19
 19. Mid and hind tibiae and femora with pennate setae
 *E. zhuae* Li, Saigusa et Yang, 2012
 – Legs with simple setae *E. janssoni* Saigusa, 2012

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